AMENDMENTS TO THE CLAIMS

Please amend Claims 14, 15, 17-21, 24-27, 38, and 40 as indicated below.

1. **(Original)** A method for collision avoidance in a wireless network wherein a first protocol and a second protocol are utilized by a plurality of data transfer terminals to transmit data over at least partially overlapping frequencies, the method comprising:

acquiring timing statistics reflective of a first data schedule for the first protocol and the second protocol during the data transmission between the plurality of data transfer terminals;

analyzing the timing statistics of the first data schedule to identify impending collisions resulting from frequency-overlap in data transmission in the first and the second protocols;

constructing a second data schedule in which the data transmission in the first and the second protocol are arranged in a non-colliding order; and

transmitting a jamming signal to manipulate the data transmission in at least one of the protocols thereby conforming the data transmission to the second data schedule such that subsequent data transmission occurs without collision.

2. **(Original)** The method of Claim 1, wherein analyzing the timing statistics further comprises identifying traffic types within the data exchange and determining quality of service for the traffic types.

3. **(Original)** The method of Claim 2, wherein the traffic types comprise a voice quality traffic type and a data quality traffic type.

4. **(Original)** The method of Claim 2, wherein constructing the second data schedule comprises prioritizing the traffic types based on the timing statistics.

5. **(Original)** The method of Claim 2, wherein constructing the second data schedule further comprises prioritizing the traffic types based on predetermined levels of quality of service.

6. **(Original)** The method of Claim 1, wherein the first protocol is a frequency-hopping spread spectrum protocol.

7. **(Original)** The method of Claim 6, wherein the frequency-hopping spread spectrum protocol is a Bluetooth protocol.

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8.   (Original)   The method of Claim 1, wherein the second protocol is a direct-sequence spread spectrum protocol.

9.   (Original)   The method of Claim 8, wherein the direct-sequence spread spectrum protocol is a wireless local area network (WLAN) protocol or an IEEE 802.11B protocol.

10.   (Original)   A data collision rectification device for use in a wireless communication network wherein frequency-overlapping protocols comprising a first protocol and a second protocol are used to exchange information between a plurality of data transfer nodes and result in periodic collisions when information is transmitted by the first and the second protocol in frequency-overlapping manner, the device comprising;

a coordination component which receives and transmits information using at least one of the protocols and moderates the exchange of information by emitting a jamming signal which delays the transmission of information in at least one of the protocols; and

a synchronization component which receives timing statistics during the exchange of information between the plurality of data transfer nodes using at least one of the protocols and subsequently assesses the timing statistics to determine if data collisions are imminent and furthermore directs the coordination component to moderate subsequent information exchange using the jamming signal to reduce data collisions between the frequency-overlapping protocols.

11.   (Original)   The device of Claim 10, wherein a transmission verification sequence is used to determine an available channel to transmit data in a non-frequency overlapping manner and wherein the jamming signal is used to temporarily and selectively exert a busy status within the wireless communication network such the second protocol is inhibited from transmitting data while the first protocol is allowed to transmit data in a non-conflicting manner.

12.   (Original)   The device of Claim 10, wherein the first protocol is a frequency-hopping spread spectrum protocol or a direct-sequence spread spectrum protocol.

13.   (Original)   The device of Claim 10, wherein the second protocol is a direct-sequence spread spectrum protocol or a frequency-hopping spread spectrum protocol.

14.   (Currently Amended)   The device of Claim 12 10, wherein the frequency-hopping spread spectrum protocol is a Bluetooth protocol.

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15.   **(Currently Amended)** The device of Claim <u>13</u> ~~10~~, wherein the direct-sequence spread spectrum protocol is a WLAN protocol or IEEE 802.11B protocol.

16.   **(Original)** The device of Claim 10, wherein the data collision rectification device uses a control point transmission verification sequence to coordinate transmission traffic in the wireless communication network.

17.   **(Currently Amended)** A method for ~~assuring~~ <u>maintaining a desired</u> quality of service in a wireless communication network having a plurality of traffic types broadcast over at least partially overlapping frequencies, the method comprising:

assigning a priority to each of the traffic types;

associating ~~a desired~~ <u>at least one</u> quality of service <u>threshold</u> ~~level~~ to each of the plurality of traffic types;

assessing ~~the~~ <u>a</u> current quality of service for <u>at least one of</u> the traffic types; and

applying a decision making sequence to prioritize the traffic types [[to]] <u>in order</u> <u>to</u> maintain the <u>current quality of service within the</u> ~~desired~~ <u>at least one</u> quality of service <u>threshold</u> ~~level~~ for each traffic type, the decision making sequence further capable of moderating ~~the~~ broadcast of at least one of the plurality of traffic types with a jamming signal, wherein use of the jamming signal is based on the priority and the ~~desirable~~ <u>at</u> <u>least one</u> quality of service <u>threshold</u> ~~level~~ of at least one of the <u>traffic types</u> ~~protocols~~.

18.   **(Currently Amended)** The method ~~for assuring quality of service~~ of Claim 17, wherein the decision making sequence detects a reduction of the current quality of service for a first traffic type and applies the jamming signal to insert a delay in at least a portion of a second traffic type with a lower priority to permit increased throughput of the first traffic type with a higher priority.

19.   **(Currently Amended)** The method ~~for assuring quality of service~~ of Claim 18, wherein the decision making sequence detects a reduction of the current quality of service for the second traffic type below the desired level of quality of service level and removes the jamming signal to halt the delay and permit the second traffic type to increase throughput to achieve the desired quality of service level.

20.   **(Currently Amended)** The method ~~for assuring quality of service~~ of Claim 17, wherein the decision making sequence detects a reduction of the current quality of service for a

first traffic type and delays the transmission of a second traffic type with a lower priority to permit increased throughput of the first traffic type with a higher priority.

21.   **(Currently Amended)** The method ~~for assuring quality of service~~ of Claim 18, wherein the first traffic type comprises a Bluetooth protocol and <u>the</u> second traffic types comprises a WLAN or IEEE 802.11B protocol, <u>the first and second traffic types being</u> ~~that are~~ simultaneously broadcast in the wireless communications network.

22.   **(Original)** A method for traffic coordination in a wireless communication network wherein a plurality of communication devices transmit information using a plurality of frequency-overlapping protocols and wherein a control point issues sequencing signals to manage traffic over the plurality of frequency-overlapping protocols to reduce collisions, the method comprising:

listening to the traffic of the communication devices;

determining an order in the traffic which reduces collision between the frequency-overlapping protocols; and

transmitting the sequencing signals to stall traffic in at least one of the frequency-overlapping protocols thereby ordering the traffic.

23.   **(Original)** The method for traffic coordination of Claim 22, wherein the sequencing signals comprise jamming signals issued by the control point to selectively order the traffic by stalling at least one of the frequency-overlapping protocols thereby permitting information transmission through other frequency-overlapping protocols such that data reduced collisions are reduced.

24.   **(Currently Amended)** The method for traffic coordination of Claim <u>23</u> ~~22~~, wherein the jamming signals are transmitted on the selected frequency-overlapping protocol at a power above a threshold level which results in wireless communication devices using the selected protocol to perceive a busy status temporarily stalling traffic in the selected protocol.

25.   **(Currently Amended)** The method for traffic coordination of Claim <u>23</u> ~~22~~, wherein the jamming signals are recognized as valid data-transmission packets containing information interpreted by wireless communication devices using the selected frequency-overlapping protocol to indicate the selected frequency-overlapping protocol is busy.

26.   **(Currently Amended)** The method for traffic coordination of Claim <u>23</u> 22, wherein the jamming signals are recognized as invalid data-transmission packets which stall the selected frequency-overlapping protocols.

27.   **(Currently Amended)** The method for traffic coordination of Claim <u>23</u> 22, wherein the jamming signals are recognized as time reservation packets containing information interpreted by wireless communication devices using the selected frequency-overlapping protocols to wait for permission to transmit.

28.   **(Original)** The method for traffic coordination of Claim 22, wherein the frequency-overlapping protocols are frequency-hopping spread spectrum protocols or direct-sequence spread spectrum protocols.

29.   **(Original)** The method for traffic coordination of Claim 22, wherein the frequency-overlapping protocols comprise a Bluetooth protocol and a wireless local area network (WLAN) protocol.

30.   **(Original)** A traffic coordination system for a wireless communication network, the system comprising:

a plurality of wireless communication devices which exchange information packets using at least one of a plurality of frequency-overlapping protocols; and

a control point which transmits jamming signals over at least one of the frequency-overlapping protocols to selectively defer the exchange of information packets between at least one of the plurality of wireless communication devices.

31.   **(Original)** The system of Claim 30, wherein the control point further transmits jamming signals over a first frequency-overlapping protocol such that packet collisions between the first frequency-overlapping protocol and a second frequency-overlapping protocol are reduced.

32.   **(Original)** The system of Claim 31, wherein the jamming signal comprises transmitting information packets in the first frequency-overlapping protocol at a power above a threshold level which results in wireless communication devices using the first frequency-overlapping protocol to perceive a busy status such that the first frequency-overlapping protocol is stalled.

33.   **(Original)**   The system of Claim 31, wherein the jamming signal comprises transmitting valid information packets over the first frequency-overlapping protocol containing information interpreted by wireless communication devices using the first frequency-overlapping protocol to indicate the first frequency-overlapping protocol is busy.

34.   **(Original)**   The system of Claim 31, wherein the jamming signal comprises transmitting valid information packets with a power above a threshold over the first frequency-overlapping protocol containing information interpreted by wireless communication devices using the first frequency-overlapping protocol to indicate the first frequency-overlapping protocol is busy.

35.   **(Original)**   The system of Claim 31, wherein the jamming signal comprises transmitting invalid information packets over the first frequency-overlapping protocol containing information interpreted by wireless communication devices using the first frequency-overlapping protocol to indicate the first frequency-overlapping protocol is busy.

36.   **(Original)**   The system of Claim 31, wherein the jamming signal comprises transmitting invalid information packets with a power above a threshold over the first frequency-overlapping protocol containing information interpreted by wireless communication devices using the first frequency-overlapping protocol to indicate the first frequency-overlapping protocol is busy.

37.   **(Original)** The method for traffic coordination of Claim 31, wherein the jamming signals are recognized by the first frequency-overlapping protocol as time reservation packets containing information interpreted by wireless communication devices using the first frequency-overlapping protocol to wait for permission to transmit.

38.   **(Currently Amended)** The system of Claim <u>31</u> ~~30~~, wherein the first frequency-overlapping protocol is a frequency-hopping spread spectrum protocol or a direct-sequence spread spectrum protocol.

39.   **(Original)**   The system of Claim 38, wherein the frequency-hopping spread spectrum protocol is a Bluetooth protocol.

40.   **(Currently Amended)** The system of Claim <u>38</u> ~~30~~, wherein the direct-sequence spread spectrum protocol is a wireless local area network (WLAN) protocol or an IEEE 802.11B protocol.

41. **(Original)** The system of Claim 30, wherein the control point further comprises an access point connected to a backbone network which permits the control point to manage data exchange between the plurality of wireless communication devices and the backbone network.

42. **(Original)** The system of Claim 41, wherein the backbone network comprises land-based networks including Ethernet, digital subscriber line, dial-up, or plane telephone networks.